(No Model.)

B. F. WILLISTON.

FOUNDATION PIER.

No. 603,354. Patented May 3, 1898.

Fig. 1.

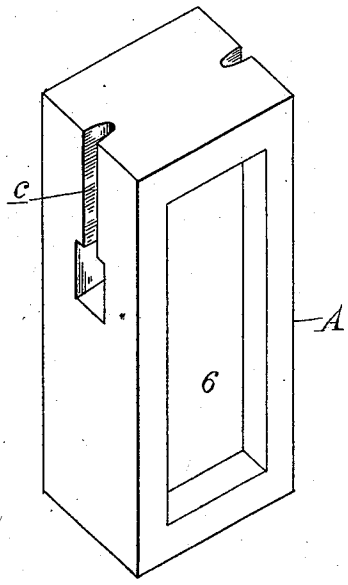


Fig. 2.

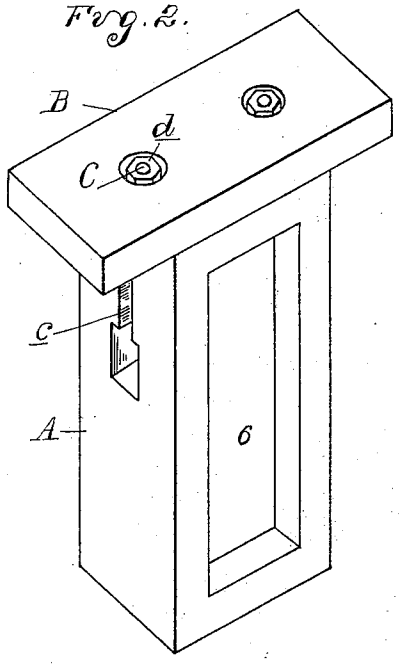
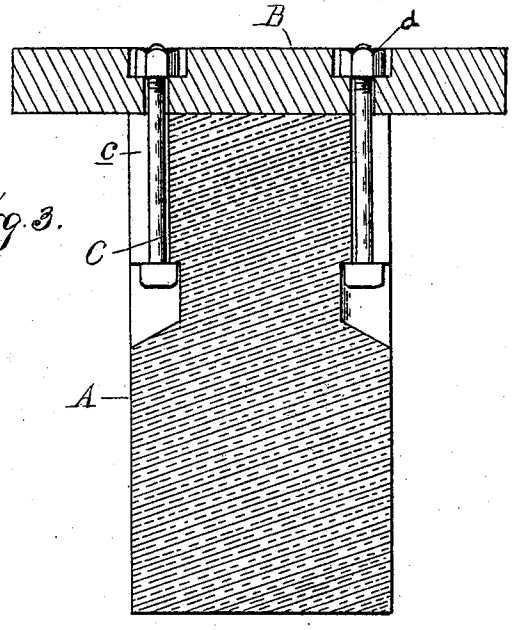


Fig. 3.



Witnesses
Otto F. Baetzhold
M. B. Dogherty.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BENJAMIN F. WILLISTON, OF JACKSON, MICHIGAN, ASSIGNOR OF ONE-HALF TO H. D. MILES AND W. P. HARRIS, OF DETROIT, MICHIGAN.

FOUNDATION-PIER.

SPECIFICATION forming part of Letters Patent No. 603,354, dated May 3, 1898.

Application filed June 1, 1897. Serial No. 638,989. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. WILLISTON, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Foundation-Piers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is primarily designed to furnish a convenient, cheap, and lasting foundation-pier for the support of pipe-lines and other structures which are supported upon posts or piers in the ground; and my invention consists in the peculiar construction of a concrete pier and in its combination with a cap, all as more fully hereinafter set forth, and shown in the accompanying drawings, in which—

Figure 1 is a detached perspective view of the concrete block forming the ground portion of the pier. Fig. 2 is a similar perspective view of the pier combined with the cap. Fig. 3 is a vertical cross-section of Fig. 2 in the plane of the bolts.

A is a solid block of concrete forming the pier proper. In general outline this block represents a parallelepipedon provided upon two opposite sides with sunk panels 6 and upon the other of its two sides with the vertical bolt recesses *c*, adapted to receive the shank and head of the bolts C. The whole pier is thus integrally formed by casting the material in its plastic condition in a suitable form and allowing it to harden as in the well-known manner.

B is the cap, preferably consisting of a solid block of wood and of a size to project with its ends beyond the sides of the pier which have the bolt-recesses, while the sides are flush with the paneled sides of the pier.

C are headed bolts uniting the cap to the top of the pier. The shanks and heads of bolts engage in the recesses *c*, and their screw-threaded ends project up through holes in the cap and engage with suitable nuts *d*, which are preferably countersunk in the cap.

The recesses *c* are formed to detachably receive the bolts *a* and hold them firmly in position when secured by the nuts, and preferably the part thereof provided for the head of the bolt is vertically enlarged sufficiently to permit the insertion or withdrawal of the bolts without disturbing the cap.

In practice, the device being constructed and arranged as shown and described, it will be seen that it forms a very convenient means of forming a permanent foundation—as, for instance, in the construction of pipe-lines and like conduits, where such piers are used at intervals to support the pipe-carriers. The pier being planted in the ground at a depth to support the cap upon the ground, it is held very firmly in line. The sunk panels also form means to the same end.

My improved foundation-pier is adapted for extended use in building all manners of foundations in which the superstructure has to be firmly supported and anchored in the ground, and it permits of either renewing the caps or bolts, or both, if decay or rust has rendered them insecure without disturbing the foundation proper.

What I claim as my invention is—

1. The combination of a pier formed with recesses in opposite sides thereof, the cap extending over the sides containing such recesses and the bolts located in said recesses detachably securing it to the pier.

2. The combination of the concrete pier *a* provided with sunk panels 6 and recesses *c* upon opposite sides respectively, the wooden cap B extending over the sides containing the recesses and the headed bolts C detachably engaging into the recesses *c* and uniting the pier and cap detachably together.

In testimony whereof I affix my signature in the presence of two witnesses.

BENJAMIN F. WILLISTON.

Witnesses:
OTTO F. BARTHEL,
M. B. O'DOGHERTY.